حمل الآن

مجانا وحصريا

امتحانات رقم (1)

الترم الاول





1 Cairo Governorate — El Salam Educational Zone

1 (A) Choose the correct answer :

1. The mouth is an organ of ..... system.
   a. nervous b. digestive c. circulatory
2. Bats can locate their preys using .....
   a. smell. b. sight. c. echolocation.
3. Ants communicate with each other using .....
   a. sight. b. smell. c. touch.

(B) Look at the following pictures then determine the type of force (push – pull) :



1. .....



2. .....

2 (A) Put (✓) or (✗) :

From the examples of behavioral adaptation in panther chameleon is puffing up its body in danger. ( )

(B) Write the scientific term :

1. A type of foxes has a thick white fur. (.....)
2. The ability to do work. (.....)

3 (A) Cross out the odd word :

Brain – Nerves – Nose – Spinal cord. (.....)

(B) 1. Classify the following objects into opaque objects and transparent objects :

(Wood – Air – Water – Metal)

Opaque objects	Transparent objects
.....	.....
.....	.....

2. Calculate the speed of a car that travels a distance of 20 km every 2 hours.

.....

.....

2 Cairo Governorate — Rod El Farag Educational Zone

1 (A) Complete the following sentences using these words :

(spinal cord – structural – stomach – gills)

1. Fish breathe in water by .....
2. From the components of the nervous system .....
3. The presence of fats under the animal's skin is a ..... adaptation.

(B) Give a reason for the following :

The seatbelt is one of the safety equipment in a car.

.....

.....

2 (A) Put (✓) or (✗) :

Humans use codes to transmit information. ( )

(B) What happens if ...?

1. Light falls on a smooth and shiny surface.

.....

2. Balanced forces act on a rest body.

.....

3 (A) Choose the correct answer :

..... is one of the light sources.

a. The moon b. The eye c. The Sun d. The mirror

(B) 1. Compare between the senses of hearing and sight (according to the organ responsible for each of them) :

Sense of hearing	Sense of sight
.....	.....
.....	.....

2. A train covers a distance of 600 km in 6 hours. Calculate the speed of the train.

The speed of the train = ... km/hour.

3 Cairo Governorate — Heliopolis Educational Zone

1 (A) Choose the correct answer :

1. When you jump high, the force affecting you must be .....

a. created. b. destroyed. c. unbalanced. d. balanced.

2. In the rainforests, we can find the .....

a. amphibians and fennec fox. b. panther chameleon and amphibians.

c. arctic fox and fennec fox. d. panther chameleon and arctic fox.

3. The force that tries to stop an object moving on a surface is called .....

a. friction. b. gravity. c. pulling. d. magnetic.

(B) Look at the following figures then answer :

1. The surface in figure (a) is .....
and the light rays reflect in ..... direction.

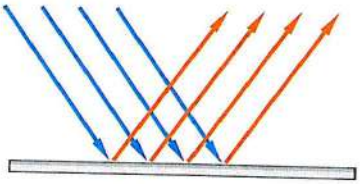


Figure (a)

2. The surface in figure (b) is .....
and the light rays reflect in ..... directions.

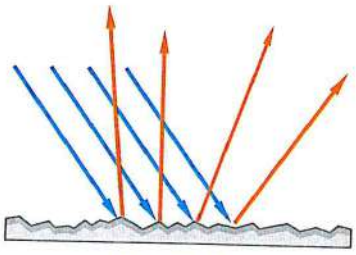


Figure (b)

2 (A) Put (✓) or (✗) :

Bats have the ability to change echo into vibrations as the cane of a blind person. ( )

(B) Give a reason for the following :

Electric lamp produces different forms of energy.

.....

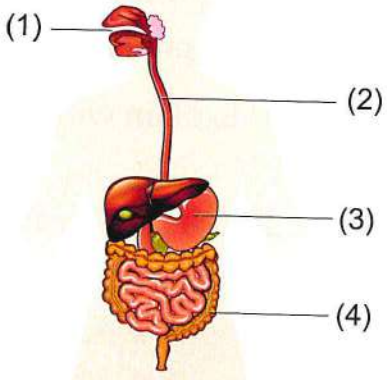
.....

(C) Look at the figure then answer :

1. Label the figure :

(1) ..... (2) .....

(3) ..... (4) .....



2. Complete the following :

a. The ..... absorbs water from the undigested food.

b. The ..... absorbs the nutrients through blood vessels.

3 (A) Correct the underlined word :

The spinal cord is the main control center in the body. (.....)

(B) Write the scientific term :

Change in the body structure of a living organism to survive. (.....)

(C) If a bus travels 100 meters in 20 seconds, calculate the speed of the bus.

.....

.....

4 Cairo Governorate — Central Cairo Educational Zone

1 (A) Put (✓) or (✗) :

1. Migration of some birds is a form of behavioral adaptation. ( )
2. The nervous system works independently of the five senses. ( )
3. Cardboard is considered a transparent material. ( )

(B) What happens if ...?

Balanced forces act on a stationary object.

.....

.....

2 (A) Choose the correct answer :

The system that provides the human body with oxygen and removes carbon dioxide is ..... system.

a. digestive b. respiratory c. circulatory d. nervous

(B) 1. How do bats communicate with each other?

.....

2. What is the type of energy produced in a roller coaster when it descends?

.....

3 (A) Complete the following sentence :

Facial expressions are a type of .....

(B) 1. **Explain why :** Animals do not eat the leaves of acacia trees.

.....

2. **Calculate the speed of a car that covers a distance of 500 kilometers in 5 hours.**

.....

5 Cairo Governorate — Mokattam Educational Zone

1 (A) Put (✓) or (✗) :

1. Exhaled air contains more oxygen gas. ( )
2. The buttress roots of the kapok tree grow upward. ( )
3. The spinal cord is the main control center of the human body. ( )

(B) Give a reason for the following :

The speed of the car decreases when the brakes are applied.

.....

.....

2 (A) Cross out the odd word :

Stomach – Small intestine – Trachea – Esophagus. (.....)

(B) Complete the following sentences:

1. Echolocation helps dolphins to determine ..... of the prey.
2. The electric fan converts the electrical energy to ..... energy.

3 (A) Choose the correct answer :

The digestive system starts with .....

a. mouth. b. nose. c. anus.

(B) Write the scientific term :

1. The energy of an object due to its motion. (.....)
2. Living organisms communicate with each other through the sense of smell. (.....)

6 Giza Governorate — 6th October Educational Zone

1 (A) Choose the correct answer :

1. ..... trees grow in salt water.

a. Kapok b. Mangrove c. Palm

2. Some messages sent by the nervous system so fast that you cannot realize them known as ..... messages.

a. heart b. brain c. reflexes

3. Producing poison in acacia tree is considered as ..... adaptation.

a. behavioral b. structural c. physiological

(B) Calculate the speed of a car that travels a distance of 80 km every two hours.

.....

.....

2 (A) Write what the following statement means :

Pattern that has a meaning. (.....)

(B) What happens if ...?

1. The body is affected by balanced forces.

.....

2. Fireflies don't emit flashes.

.....

3 (A) Complete the following sentence :

The property that enables bats to locate their prey is .....

(B) Give reasons for :

1. The speed of the jet plane is greater than the speed of the truck.

.....

2. Humpback whales sing under water.

.....

7 Giza Governorate — Kerdasa Educational Zone

1 (A) Choose the correct answer :

1. When light falls on a mirror, it is .....

a. reflected. b. refracted. c. scattered. d. absorbed.

2. ..... cover(s) the body of the arctic fox.

a. Heavy hair b. Heavy skin c. Thick fur d. Many feathers

3. Animals that become active at night are called ..... animals.

a. diurnal b. nocturnal c. extinct d. endangered

(B) Write one example of :

Potential energy: .....

2 (A) Cross out the odd word :

Flashlight – Mirror – The moon. (.....)

(B) What happens if ...?

1. You switch on an electric lamp. (according to the change of energy)

.....

2. The hearing sense of humpback whales becomes weak.

.....

3 (A) Correct the underlined word :

Fish use gills to take carbon dioxide gas from water. (.....)

(B) Give reasons for :

1. You can't see an object placed behind a wood.

Because it doesn't allow .....

2. The Shockwave truck is faster than the normal truck.

Because it has ..... jet engines.

8 Giza Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. From the structural adaptation of water lily plant is that it has .....
   a. long roots. b. needle leaves. c. wide leaves.
2. Reading and writing are common types of communication in ..... world.
   a. humans b. animals c. plants
3. The..... of light helps to see yourself in the mirror.
   a. reflection b. absorption c. density

(B) What happens if ...?

1. Your hand touches the spines of plant.

   .....

   .....

2. You pull an object.

   .....

   .....

2 (A) Cross out the odd word :

Small intestine – Stomach – Trachea – Large intestine. (.....)

(B) Write two examples of :

1. Forms of kinetic energy.

   .....

   .....

2. Safety equipment in the car.

   .....

   .....

3 (A) Correct the underlined word :

Humpback whales produce high-pitched sound in summer. (.....)

(B) Give reasons for :

1. Some animals make camouflage.
   To ..... from the enemies.
2. The book which is put on a table has energy.
   Because it stores .....

9 Giza Governorate — Dokki Educational Zone

1 (A) Choose the correct answer :

1. The firefly beetle uses ..... to communicate.
   a. smell b. light c. echo
2. The animal that has the ability to turns its head in all directions is the .....
   a. owl. b. snake. c. dolphin.
3. Fish use ..... to breathe in water.
   a. tail b. eye c. gills

(B) Write an example of :

Safety equipment used during collision of cars.

.....

2 (A) Cross out the odd word :

Small intestine – Stomach – Trachea – Large intestine. (.....)

(B) What happens if ...?

1. The amount of food in the ants colony decreases.
   The ..... ants send ..... messages to scout ants to alert them to find the food.
2. You operate an electric fan.
   The ..... energy changes into ..... energy.

3 (A) Put (✓) or (✗) :

The moon is a source of light. ( )

(B) Give a reason for the following :

1. Parachutes are used in the Shockwave truck.
   To help ..... their movement.
2. The penguin's body has a thick layer of fat and dense feathers.
   To keep its body .....

10 Alexandria Governorate — El-Montazah Educational Zone

1 (A) Choose the correct answer :

1. When an object is in motion, this means that its ..... changes.
   a. color b. shape c. size d. position
2. The tan-colored fur of fennec fox protects it from .....
   a. wind. b. rains. c. hot weather. d. cold weather.
3. When you move something towards you, this represents .....
   a. pushing force . b. light energy. c. pulling force. d. sound energy.

(B) Give a reason for the following :

Owls can hunt during the night.

.....

.....

2 (A) Put (✓) or (✗) :

Seatbelt is one of safety equipment in cars. ( )

(B) Write the scientific term :

1. The type of energy that is affected by the height of objects. (.....)
2. Trees that grow in amazon rainforest. (.....)

3 (A) Cross out the odd word :

Penguin – Polar bear – Snake – Arctic fox. (.....)

(B) Complete the following statements :

1. The dolphin has sharp sense of .....
2. Fish breathe ..... gas which dissolves in water.

11 Alexandria Governorate — East Educational Zone

1 (A) Choose the correct answer :

1. Ants use the ..... sense to communicate with each other.
   a. speaking b. smell c. sing d. hear
2. Spinal cord is an important organ in the ..... system.
   a. digestive b. respiratory c. nervous d. circulatory
3. Fish use ..... to take oxygen that is dissolved in water.
   a. lungs b. skin c. nose d. gills

(B) What happens when ...?

Balanced forces affect an object in rest.

.....

.....

2 (A) Put (✓) or (✗) :

The special cane of blind people depends on echo sound property. ( )

(B) Write the scientific term :

1. A force pulls objects downward. (.....)
2. The time taken by the body to react to a danger. (.....)

3 **(A) Complete the following sentence using one of the words below :**
(desert – salt water – both fresh and salt water)

Bull shark adapted to live in .....

(B) Mention one use of :

1. Wrecking ball.

.....

2. Brain.

.....

12 Alexandria Governorate — West Educational Zone

1 **(A) Complete the following sentences using the words between brackets :**

1. Buttress roots in Kapok trees is considered ..... adaptation.
(structural – behavioral)

2. Both desert lizards and panther chameleons are a type of .....
(amphibians – reptiles)

3. Sound is transmitted in the form of ..... (columns – waves)

(B) Calculate the speed of a train traveling a distance of 800 km in 8 hours.

Car speed = Distance ÷ Time = ... ÷ ..... = ... km/h.

2 **(A) Put (✓) or (✗) :**

The sense organs are responsible for collecting information from the external environment and transmitting it to the brain. ( )

(B) Write the scientific term :

1. A very heavy steel ball used to break down the walls of buildings. (.....)
2. Small air sacs surrounded by blood vessels, from which oxygen is transferred to the blood. (.....)

3 **(A) Choose the correct answer from the following :**

The following creatures are characterized by a strong sense of sight, except .....

a. cats. b. dogs. c. bats. d. owls.

(B) What happens if ...?

1. Undigestive food reaches the large intestine.

.....

2. Turn on the electric fan in the house.

.....

13 Qalyoubia Governorate — Banha Educational Zone

1 (A) Choose the correct answer :

1. Adaptation helps living organisms to .....
   a. survive and reproduce. b. extinct.
   c. die. d. be sick.
2. Echolocation helps dolphins identify..... of their preys.
   a. color b. location c. smell d. taste
3. The process of vision occurs as a result of .....of light.
   a. scattering b. reflection c. absorption d. refraction

(B) Write the scientific term of the following :

Force that pulls objects down toward the Earth. (.....)

2 (A) Correct the underlined word :

Oxygen enters the lungs during the process of exhalation. (.....)

(B) 1. Give a reason for the following :

Owl turns its head in all directions.

.....

2. What happens if ...?

A roller coaster stops. (according to its kinetic energy)

.....

3 (A) Put (✓) or (✗) :

Fireflies use the sense of hearing to communicate. ( )

(B) Mention one function of the following :

1. The teeth in digestion process.

   .....

2. The parachutes in Shockwave truck.

   .....

14 Menofia Governorate — Shebeen El-Koum Educational Zone

1 (A) Put (✓) or (✗) :

1. Bats are from nocturnal animals. ( )
2. The diaphragm contracts downward during exhalation. ( )
3. Glass is considered from opaque objects. ( )

(B) What happens if ...?

Unbalanced forces affect a stopped object.

.....

2 (A) Complete the following statement using the words between brackets :

Ants communicate with each other through their sense of ..... (sight – smell)

(B) Mention the importance of each of the following :

1. Thick fur in polar bear : .....
2. Seatbelt in the car : .....

3 (A) Write the scientific term :

It is a pattern that has meaning. (.....)

(B) 1. Mention one function of brain.

.....

2. Write two forms of potential energy :

1. .....
2. .....

15 Sharkia Governorate — Abo Kbeer Educational Zone

1 (A) Put (✓) or (✗) :

1. Arctic fox lives in tundra, while fennec fox lives in hot desert. ( )
2. The large ear of jerboa is an example of structural adaptation. ( )
3. Echolocation is a type of communication between humans. ( )

(B) Give reasons for :

1. The Shockwave truck is faster than the normal truck.

.....

2. A bird stops on a tree has an energy.

.....

2 (A) Choose the correct answer :

Dolphins depend on their sharp sense of ..... to get food.

a. sight b. smell c. hearing

(B) What happens ...?

1. If the polar bear has thin fur.

.....

2. To the energy of the roller coaster when it moves down the hill.

.....

3. If a car runs out of fuel on a flat road.

.....

4. If the diaphragm moves upward during exhalation.

.....

3 (A) Correct the underlined word :

Humpback whales produce low-pitched sounds in winter. (.....)

(B) Give one example of each of the following :

1. Structural adaptation for mangrove trees.

.....

2. Forms of kinetic energy.

.....

3. Air pollutants.

.....

4. Pushing force.

.....

16 Gharbia Governorate — Gharbia Educational Zone

1 (A) Choose the correct answer :

1. The food moves into the stomach through the .....
   a. esophagus. b. trachea. c. small intestine. d. tongue.
2. The animal that depends on echolocation to catch its preys is .....
   a. owl. b. snake. c. bat. d. cat.
3. Light travels in ..... lines in the form of waves.
   a. circular b. curved c. zigzag d. straight

(B) Give a reasons for the following :

Shockwave truck is faster than normal truck.

.....

.....

2 (A) Put (✓) or (✗) :

Fish use gills to take the dissolved oxygen in water. ( )

(B) 1. Give a reason for the following :

Fireflies emit flash light.

.....

.....

2. Classify the following forms of energy into potential and kinetic energies :

(Chemical – Electrical – Thermal – Gravitational)

Potential energy: .....

Kinetic energy: .....

3 (A) Cross out the odd word :

Brain – Heart – Nerves – Spinal cord. (.....)

(B) Give only one example of each of the following :

1. Behavioral adaptation in bull shark.

.....

2. Safety equipment in cars.

.....

17 Dakahlia Governorate — Science Inspectorate

1 (A) Correct the underline word :

Exhaled air contains oxygen. (.....)

(B) Answer the following questions :

1. Determine the type of adaptation in each of the following :

a. Thick and white fur in the polar bear.

.....

b. Fennec fox lives in burrows.

.....

2. What is meant by ...?

Energy : .....

3. Which of the following consumes less fuel a truck or a small car ?

.....

2 (A) Choose the correct answer from the following :

1. ..... passes the food from pharynx to stomach.

a. Esophagus b. Stomach c. Trachea d. Alveoli

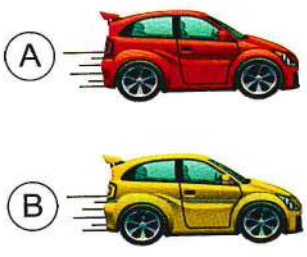
2. All of the following are components of the nervous system, except .....

a. spinal cord. b. heart. c. nerves. d. brain.

3. One of the adaptations that helps the animal protects itself from enemies is .....

a. camouflage. b. extinction. c. migration. d. reproduction.

(B) If the two cars moved at the same time for 20 seconds car (A) covered a distance of 100 meters, while car (B) covered a distance of 300 meters. Which of the two cars has a higher speed?



.....

.....

3 (A) Put (✓) or (✗) :

Bats use their sense of smell to avoid dangers. ( )

(B) 1. The opposite figure shows the acacia tree.

Explain one of the features of its leaves.



.....

.....

2. Compare between transparent and opaque objects :

Point of comparison	Transparent objects	Opaque objects
One example	.....	.....

(C) 1. Classify the following energies into kinetic and potential :

(Light – Chemical – Thermal – Gravitational)

Potential energy	Kinetic energy
.....	.....

2. Give one function of the airbag.

.....

18 Damietta Governorate — Science Inspectorate

1 (A) Complete the following sentences using the words below :

(gravity – structural – friction – behavioral – speed – thermal energy)

1. Panting in fennec fox is considered a ..... adaptation in living organisms.
2. ..... helps in cooking food.
3. The force that arises between the surfaces of two contacted bodies is .....

(B) Give reasons for :

1. The arctic fox has a thick fur.

.....

2. The Shockwave truck is faster than a normal truck.

.....

2 (A) Cross out the odd word :

Taste – Smell – Hearing – Eyes – Touch. (.....)

(B) Write the scientific term :

1. The form of energy that increases when the object's speed increases. (.....)
2. The muscle that contracts during inhalation and expands during exhalation. (.....)
3. The force that you make to move an object away from you. (.....)
4. A safety equipment used to prevent car passengers from moving forward when the car stops suddenly. (.....)

3 (A) Choose the correct answer :

A train covers a distance 600 km in a time of 6 hours, its speed = ...

a. 3600 km/hr. b. 100 km/hr. c. 600 km/hr. d. 100 m/sec.

(B) Explain the energy transformation for the following :

The device	Energy used	Energy produced
1. Door bell	.....	.....
2. Television (TV)	.....	.....
3. Electric fan	.....	.....
4. Spring powered toy	.....	.....

19 Kafr El-Sheikh Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. All the following organisms are adapted to live in arctic regions, except .....
   a. arctic fox. b. polar bear. c. pine tree. d. fennec fox.
2. The speed of a car travels 200 meters in 5 seconds is .....
   a. 40 km/h. b. 1000 m/sec. c. 40 m/sec. d. 50 km/h.
3. When a roller coaster moves down on a ramp, its ..... decreases.
   a. kinetic energy b. potential energy c. speed d. mass

(B) Give a reason for the following :

Parachutes are used in Shockwave trucks and rockets.

.....

2 (A) Put (✓) or (✗) :

When the car suddenly stops, the passengers move forward. ( )

(B) Write the scientific term :

1. Winged beetles that use light to communicate with each other. (.....)
2. It is the force that pulls objects down toward the Earth. (.....)

3 (A) Cross out the odd word :

Rock – Wood – Air – Aluminum foil. (.....)

(B) Complete the following sentences :

1. The diaphragm relaxes during ..... process.
2. The spinal cord belongs to the ..... system.

20 Behira Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. Light can pass through .....
   a. wood. b. glass. c. carton.
2. Speed of a car that covers 150 km in 3 hours is ..... km/hr.
   a. 50 b. 100 c. 25
3. Humpback whales communicate through .....
   a. songs. b. smelling. c. light.

(B) What is the scientific explanation ...?

Objects falls down towards the center of the Earth.

.....

2 (A) Complete the following sentence :

The stored energy inside the object is .....

(B) What happens if ...?

1. There is a danger nearby the ants colony.

.....

2. Balanced forces affect on a stopped object.

.....

3 (A) Write the scientific term :

It is a force that exerted between two objects that rub each other. (.....)

(B) What is the importance of each of the following :

1. Diaphragm muscle.

.....

2. Airbag.

.....

21 Ismailia Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. Which of the following materials is the best in reflecting light ? .....
   a. Wood. b. Clothes. c. Mirror. d. Carton.
2. Animals that become active at night are called ..... animals.
   a. reptiles b. beetles c. nocturnal d. fish
3. Penguin's feet don't freeze due to the effect of their .....
   a. blood vessels. b. fats. c. fur. d. feathers.

(B) Give one example of :

A transparent material.

.....

2 (A) Write the scientific term :

The system that the brain and nerves are parts of it. (.....)

(B) Give reasons for :

1. The Shockwave truck is faster than the normal truck.

   .....

2. Moon is not considered as a source of light.

   .....

3 (A) Put (✓) or (✗) :

Thumps-up or thumps-down is considered a code. ( )

(B) Mention :

1. The type of potential energy in the battery.

   .....

2. The type of adaptation in panther chameleon that has V-shaped feet.

   .....

22 Suez Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. The thick fur of the polar bear belongs to ..... adaptation.
   a. only structural b. only behavioral
   c. only functional d. structural and behavioral
2. Which of the following organs is working for touching objects? .....
   a. Nose. b. Eye. c. Skin. d. Tongue.

3. ..... uses echolocation.

a. Snake b. Jerboa c. Dolphin d. Owl

(B) Write the scientific term :

Force between the car tires and the road which decreases its speed.

(.....)

2 (A) Put (✓) or (✗) :

Nocturnal animals have wide eyes than human. ( )

(B) Correct the underline words :

1. The smaller the mass of a car, the large fuel it consumes. (.....)
2. Fish use gills to take oxygen gas from air. (.....)

3 (A) Complete the following sentence using one of the words below :

(Transparent objects – Opaque objects)

..... don't allow the light to pass through.

(B) Mention two examples of each of the following:

1. Organs of digestive system :

..... and .....

2. Energies :

..... and .....

23 Beni Suef Governorate — Science Inspectorate

1 (A) Choose the correct answer :

1. The presence of thick white fur is an adaptation in .....

a. starred agama lizard . b. polar bear.

c. fennec fox. d. forest bear.

2. All the following are organs of the digestive system, except .....

a. mouth. b. stomach. c. lungs. d. small intestine.

3. Dolphins depend on their sense of ..... to get food.

a. sight b. taste c. smell d. hearing

(B) Give reasons for :

1. Water lilies have wide floating leaves.

.....

2. A bird on a tree has an energy.

.....

2 (A) Correct the underlined words :

1. If the mass of an object increases, its kinetic energy decreases. (.....)
2. Opaque objects include water, glass and air. (.....)
3. The moon is one of light sources in the sky. (.....)
4. The behavioral adaptation is a change in the body structure of a living organism to survive. (.....)

(B) What happens when ...?

A roller coaster moves from up to down. (according to the change in its energy).

.....

3 (A) Write the scientific term :

1. It is the ability to do work or cause a change. (.....)
2. A type of foxes that changes its fur color between winter and summer season. (.....)
3. The main control center in the body. (.....)

(B) Complete the following sentences :

1. ..... is a push or pull that is applied to an object causes it to change its position.
2. In the electric bell, ... energy changes into ..... energy.

24 Minia Governorate — Bani Mazar Educational zone

1 (A) Match column (A) with column (B):

(A)	(B)
1. Blind person's cane	a. a group of nerves connected directly to the brain.
2. Spinal cord	b. potential energy.
3. Chemical energy	c. emits vibrations upon detecting an obstacle.

1. ..... 2. ..... 3. .....

(B) What happens when ...?

Light falls on the object of a smooth surface.

.....

2 (A) Put (✓) or (✗) :

Friction force acts in the opposite direction of motion. ( )

(B) What is meant by ...?

Code : .....

(C) What are the factors that the kinetic energy depends on ?

.....

3 (A) Choose the correct answer from the following choices :

Humpback whales communicate with each other through .....

(singing – dancing – flashing)

(B) Give a reason for the following :

Acacia tree roots grow deep downward.

.....

(C) Calculate the speed of a bicycle that travels 200 meters in 50 seconds.

.....

.....

25 Matrouh Governorate — Matrouh Educational zone

1 (A) Put (✓) or (✗) for each of the following:

1. Small intestine from the important organs in the respiratory system. ( )
2. Firefly beetles communicate by the sense of smell. ( )
3. Brain is the main control center in the human body. ( )

(B) What happens if ...?

The speed of object increases. (according to the kinetic energy)

.....

2 (A) Choose the correct answer :

All of the following are forms of kinetic energy, except .....

a. sound. b. light. c. food. d. electricity.

(B) Complete the following sentences :

1. Panting in fennec fox is considered as ..... adaptation, while long ears is considered as ..... adaptation.
2. We can identify the colors by using ..... sense, while we can differentiate between smooth and rough things by ..... sense.

3 (A) Write the scientific term :

A force that you make to move an objects away from you. (.....)

(B) Give reasons for :

1. The moon appears bright although it is not source of light.

.....

2. Electric lamp produces different types of energy.

.....

Final Examinations of Some Governorates

Cairo Governorate

1 El Salam Educational Zone

1 (A) 1. b 2. c 3. b

(B) 1. Pull
2. Push

2 (A) (✓)

(B) 1. Arctic fox. 2. Energy.

3 (A) Nose (all items are organs of the nervous system except nose is an organ of respiratory system).

(B) 1. Opaque objects:
Wood – Metal
Transparent objects:
Air – Water

2. Speed = $\frac{\text{Distance}}{\text{Time}}$

$= \frac{20}{2} = 10$ km/hr.

2 Rod El Farag Educational Zone

1 (A) 1. gills.
2. spinal cord.
3. structural

(B) To keep the driver's body and also the passengers from moving forward when the car stops suddenly.

2 (A) (✓)

(B) 1. Light rays are reflected in one direction.
2. The body will not move.

3 (A) 1. c

(B) 1. Hearing : The ear
Sight : The eye

2. $\frac{\text{Distance}}{\text{Time}} = \frac{600}{6} = 100$

3 Heliopolis Educational Zone

1 (A) 1. c 2. b 3. a

(B) 1. smooth – one
2. rough – different

2 (A) (✗)

(B) Because it produces light and thermal energies.

(C) 1. (1) Mouth.
(2) Esophagus.
(3) Stomach.
(4) Large intestine.
2. a. large intestine
b. small intestine

3 (A) brain

(B) Structural adaptation.

(C) Speed = $\frac{\text{Distance}}{\text{Time}}$

$= \frac{100}{20} = 5$ m/sec.

4 Central Cairo Educational Zone

1 (A) 1. (✓) 2. (✗) 3. (✗)

(B) The object will not move.

2 (A) b

(B) 1. Bat makes a high-pitched sound that hits and reflects back to it in the form of echo, when it listens for the echo, it knows that there is something nearby.

2. Kinetic energy.

3 (A) code.

(B) 1. Because acacia tree produces a poison when an animal begins eating its leaves to make the leaves taste very bad.

2. Speed = $\frac{\text{Distance}}{\text{Time}}$

$= \frac{500}{5} = 100$ Km/hr.

5 Mokattam Educational Zone

1 (A) 1. (✗) 2. (✓) 3. (✗)

(B) Due to the friction force between the car tires and the road that acts in the opposite direction of the car movement.

2 (A) Trachea (all items are organs of the digestive system except trachea is an organ of the respiratory system).

(B) 1. location

2. kinetic

3 (A) a

(B) 1. Kinetic energy.

2. Ants.

Giza Governorate

6 6th October Educational Zone

1 (A) 1. b 2. c 3. a

(B) Speed = $\frac{\text{Distance}}{\text{Time}}$

$= \frac{80}{2} = 40$ km/hr.

2 (A) 1. Code.

(B) 1. The body will not move.

2. They cannot communicate with each other.

3 (A) echolocation.

(B) 1. Because the engines on the jet plane are more powerful than the engine in a truck.

2. To communicate with each other.

7 Kerdasa Educational Zone

1 (A) 1. a 2. c 3. b

(B) A ball that is lifted up away from the Earth's surface.

2 (A) Flashlight (all items reflect light except flashlight is a source of light).

(B) 1. Electric energy changes into light and thermal energies.

2. They cannot communicate with each other easily.

3 (A) oxygen

(B) 1. light to pass through.

2. three

8 Science Inspectorate

1 (A) 1. c 2. a 3. a

(B) 1. The hand will move quickly away in less than one second.

2. The object becomes closer to me.

2 (A) Trachea (all items are organs of the digestive system except trachea is an organ of the respiratory system).

(B) 1. Electric energy – Thermal energy.

2. Seatbelts – Airbags.

3 (A) low

(B) 1. hide.

2. potential energy.

9 Dokki Educational Zone

1 (A) 1. b 2. a 3. c

(B) Seatbelts.

2 (A) Trachea (all items are organs of the digestive system except trachea is an organ of the respiratory system).

(B) 1. nurse – smelly

2. electrical – kinetic

3 (A) (✗)

(B) 1. stopping.

2. warm.

Alexandria Governorate

10 El-Montazah Educational Zone

1 (A) 1. d 2. c 3. c

(B) Because they have very sharp sight and hearing senses.

2 (A) (✓)

(B) 1. Potential energy.

2. Kapok trees.

3 (A) Snake (all items are animals live in polar regions except snake lives in deserts).

(B) 1. hearing. 2. oxygen

11 East Educational Zone

1 (A) 1. b 2. c 3. d

(B) The object will not move.

2 (A) (✓)

(B) 1. Gravity.

2. Reaction time.

3 (A) both fresh and salt water.

(B) 1. It

Qalyoubia Governorate

13 Banha Educational Zone

1 (A) 1. a 2. b 3. b

(B) Gravity.

2 (A) inhalation

(B) 1. To search for preys

everywhere

3 (A) Put (✓) or (✗):

1. Acacia tree stores water in its roots. ( )
2. In cricket game, the bat transfers its potential energy to the ball. ( )

(B) What happens if:

1. Light rays fall on a shiny smooth surface such as a mirror?

.....

2. You throw a ball upwards? (According to its potential energy)

.....

(C) What's meant by:

- Friction?

.....

4 (A) Choose the correct answer:

1. The chemical energy stored in batteries is considered a form of ..... energy.
   ⓐ potential ⓑ kinetic ⓒ heat ⓓ sound
2. ..... use echolocation by producing high-pitched sounds in the air.
   ⓐ Dolphins ⓑ Owls ⓒ Whales ⓓ Bats

(B) Complete the following sentences:

1. Fireflies depend on the sense of ..... to communicate, while ants depend on the sense of ..... to communicate.
2. Kinetic energy increases by increasing the ..... and ..... of an object.

(C) Look at the following figure, then complete:

- Changing the color fur of arctic fox into ..... color when snow melts is considered as a ..... adaptation.



Model Exam 7

1 (A) Choose the correct answer:

- Writing and reading is a type of communication among ..... .

ⓐ humans ⓑ birds ⓒ plants ⓓ animals

(B) Complete the following sentences:

1. Two ..... allow air to pass from the ..... to the two lungs.
2. The speed = ... ÷ ..... .
3. The eyes send messages to the ..... through the ..... .
4. An apple falling from a tree is caused by the ..... force of ..... .

2 (A) Cross out the odd word:

- Polar bear – Pine tree – barbary fig – Arctic fox (.....)

(B) Write the scientific term:

1. It is the energy that the object gains due to its motion. (.....)
2. It is a liquid found in the mouth that facilitates the swallowing of food. (.....)
3. It is the visible form of energy that enables us to see. (.....)
4. It is the organ that is affected by light and responsible for sight. (.....)

3 (A) Correct the underlined word:

1. **Fennec fox** lives in burrows at night. (.....)
2. **Potential** energy is transferred between two objects during a collision. (.....)

(B) Give a reason for:

1. Water lily has wide, floating leaves.

.....

.....

2. Air and water are considered transparent materials.

.....

.....

3. A bird flying up in the sky, its potential energy increases.

.....

.....

4 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Pulling force	ⓐ is used to open a closed drawer.
2. Pushing force	ⓑ is a type of energy.
	ⓒ is used to catch a ball is thrown in air.

1. ..... 2. .....

(B) What happens if:

1. Panther chameleon is exposed to danger?

.....

.....

2. Light rays fall on a rough surface, such as wood or paper?

.....

.....

(C) Look at the following figure, then complete:

- When the spring is compressed, the ..... energy is converted into ..... Energy.



Model Exam 8

1 (A) Cross out the odd word:

- Eye – Ear – Tongue – Hearing (.....)

(B) Give a reason for:

1. Bat is a nocturnal animal.

.....

2. Driving fast is very dangerous.

.....

(C) Write the scientific term:

1. It is the gas present in air and water that living organisms breathe in during respiration. (.....)
2. It is an organ through which solid waste leaves the body. (.....)

2 (A) Would you apply pulling or pushing force to lift a bag from the ground?

.....

(B) Compare between:

1.

P.O.C	Acacia tree	Kapok tree
Habitat	.....	.....
Shape of leaves	.....	.....

2.

P.O.C	Transparent materials	Opaque materials
Definition	.....	.....

(C) Look at the following figure, then complete:



- When the player hits the ball with the bat, the ...../..... energy of the bat transfers to the ball and its speed ..... .

3 (A) Choose the correct answer:

1. The process of vision occurs as a result of the ..... of light.
   ⓐ scattering ⓑ reflection ⓒ absorption ⓓ refraction
2. The sense organs collect information and send signals to the ..... for processing and understanding.
   ⓐ lungs ⓑ nerves ⓒ spinal cord ⓓ brain

(B) Mention the importance of each of the following:

1. Stomach.

   .....

2. Skin for amphibians.

   .....

(C) Explain the relation between the kinetic energy of a moving object and its speed.

.....

.....

4 (A) Correct the underlined word:

1. **Panther chameleon** has sandy-colored scales. (.....)
2. The force that arises between the surfaces of two objects in contact is known as **gravity**. (.....)

(B) What happens if:

1. You turn on the gas oven? (According to the change of energy)

   .....

   .....

2. Ant's colony is exposed to danger?

   .....

   .....

3. A moving car runs out of fuel?

   .....

   .....

Model Exam 9

1 (A) Choose the correct answer:

• ..... such as salamanders live in ..... environments.

ⓐ Reptiles – dry
ⓑ Amphibians – dry
ⓒ Amphibians – moist
ⓓ Reptiles – wet

(B) Complete the following sentences:

1. When a car moves up on a ramp, its kinetic energy ..... , while its potential energy ..... .
2. The sensory receptors in your ..... sense the hotness and coldness of weather, while those in your ..... helps you identify the sour taste of lemon.
3. ..... is a long winding tube in which ..... and pancreas pour their juices.
4. If Noor travels with her bicycle a distance of 20 km in two hours, she is travelling at a speed of ..... km/hr.

2 (A) Correct the underlined word:

• Energy before collision is **greater than** the energy after collision. (.....)

(B) Give a reason for:

1. Barbary figs have sharp spines.

.....

2. A book placed on a table doesn't move.

.....

3. Egyptian mongooses produce sounds like chatter.

.....

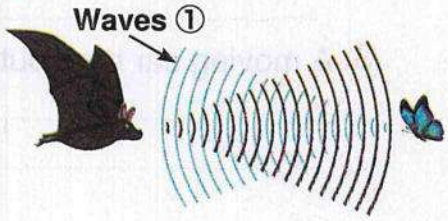
(C) Look at the opposite figure then answer the questions below:

1. What's the name of the property used by the bat in this figure?

.....

2. What's the name of the waves ①?

.....



3 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Sound energy	ⓐ is a visible form of kinetic energy that travels in air in the form of waves.
2. Chemical energy	ⓑ is an audible form of kinetic energy that travels in air in the form of waves.
	ⓒ is a form of potential energy that is stored in the food we eat.

1. ..... 2. .....

(B) What happens if:

1. The pulling force of one of the two teams in tug-of-war game is greater than the other team?

.....

2. The blood vessels in the penguin's feet and toes aren't weave around each other?

.....

3. A boy moves down the slide? (According to the change of energy)

.....

4 (A) Classify the following materials into transparent and opaque:

(Air – Carton – Metal – Glass)

Transparent materials	Opaque materials
.....	.....

(B) Write the scientific term:

1. It is a muscle that contracts during inhalation and expands during exhalation.
(.....)
2. It is a form of potential energy that causes objects to rush towards the Earth's surface. (.....)
3. It is the force exerted when objects rub against each other. (.....)

Model Exam 10

1 (A) Cross out the odd word:

- Esophagus – Saliva – Stomach – Small intestine (.....)

(B) Give a reason for:

1. Gills are unique structural adaptations in fish.

.....

2. Dogs are used in guarding.

.....

3. Firefly beetles produce a chemical reaction inside their bodies.

.....

4. The goal net vibrates when a moving ball hits it.

.....

2 (A) Choose the correct answer:

- Light rays travel in the form of ..... lines in the air.

ⓐ curved ⓑ straight ⓒ circular ⓓ zigzag

(B) Compare between each of the following:

P.O.C	Arctic fox	Fennec fox
Habitat	.....	.....
Size of ears	.....	.....

(C) Mention the function of each of the following:

1. Large intestine.

.....

.....

2. Spinal cord.

.....

.....

3 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Pulling force	ⓐ is the force used to move an object away from you.
2. Pushing force	ⓑ can be observed when gravity pulls objects upward.
	ⓒ is the force used to move an object towards you.

1. ..... 2. .....

(B) Write the scientific term:

1. It is a pattern that has a meaning. (.....)
2. It is the change in an object's position relative to a fixed point. (.....)
3. They are air sacs surrounded by blood vessels in the respiratory system. (.....)

4 (A) Put (✓) or (✗):

1. Energy is not destroyed, but it changes from to one form to another. ( )
2. Seatbelts absorb the energy of the passengers during collision. ( )

(B) What happens if:

1. You see the red traffic light as you crossing the road?

.....

.....

.....

2. The kinetic energy of a moving car increases?

(According to the damage during collision)

.....

.....

.....

3. You put an opaque object between a light source and a wall?

.....

.....

.....

Governorate Exams

Model 1 Cairo – New Cairo Directorate

1 (A) Put (✓) or (✗) on the following statement:

1. The body of penguin is covered by dense fur in order to be warm. ( )
2. The food chain begins with consumers. ( )
3. A ball at the top of the hill has potential energy. ( )

(B) What happens when turning on the gas oven?

.....

2 (A) Complete the following sentence:

- The main control center of the body is the ..... .

ⓐ nerves ⓑ brain ⓒ spinal cord ⓓ lung

(B) Give a reason for:

1. Fireflies emit flashlights.

.....

2. The driver uses the seatbelt while driving.

.....

3 (A) Write the scientific term:

- It is a pattern that has meaning. (.....)

(B) 1- Determine the type of adaptation (Structural – Behavioral):

a. Acacia tree sends a smelly message. (.....)

b. Fennec fox has large ears. (.....)

2- Write the type of energy (potential – Kinetic):

a. A book on a table. (.....)

b. Pushing a wheelbarrow. (.....)

Model 2 Cairo – Ain shams Directorate

1 (A) Choose the correct answer:

1. Animals that live in a hot environment have ..... ears to help them get rid of the excessive body temperature.
   ⓐ small ⓑ short ⓒ long ⓓ sharp
2. You could determine how loud the train sound is by ..... .
   ⓐ sound pitch ⓑ sound style ⓒ sound echo ⓓ sound type

(B) Observe the image carefully and then answer:



- In the image, there are means of safety equipment passengers during a collision, which are.

1. ..... 2. .....

2 (A) Put (✓) or (✗) on the following statement:

- Nocturnal animals have eyes that are larger than human eyes. ( )

(B) Answer the following:

- Which of the following surface represents the reflection of light rays from wooden spoon- and what is reason?

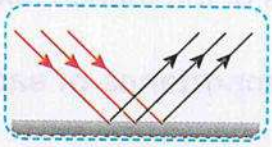


Figure (A)

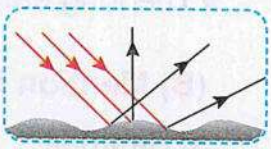


Figure (B)

.....

(C) Calculate the speed of train that covers 450 km in a time of 3 hours.

.....

3 (A) Write the scientific term:

- It is the time that body takes to receive information from the environment.

(.....)

(B) Give reasons for:

1. The fennec fox and arctic fox eat all types of food.

.....

2. When a ball is pushed on the ground, it moves a distance and then stops.

.....

Model 3 Cairo – Al shorouk Directorate

1 (A) Choose the correct answer:

1. Fish breathe oxygen dissolved in water by ..... .

ⓐ Lungs ⓑ Gills ⓒ Skin ⓓ Fins

2. An animal that has ability to turn its head in all directions is ..... .

ⓐ Snake ⓑ Jerboa ⓒ Dolphin ⓓ Owl

3. ..... passes the food from pharynx to stomach.

ⓐ Esophagus ⓑ Stomach ⓒ Trachea ⓓ Alveoli

(B) Write the scientific term:

- It is the ability to do work. (.....)

2 (A) Complete the following statement:

- The long ears of the fennec fox are example of ..... adaptation.

(B) Mention importance of each of the following:

1. Seatbelt.

.....

.....

2. A wrecking ball.

.....

.....

3 (A) Put (✓) or (✗) on the following statement:

- Nocturnal animals become active at morning to look for their food. ( )

(B) Correct the underlined words:

1. Airbags are made up of thick wooden material. (.....)
2. When the object moves faster, its potential energy increases. (.....)

Model 4 Cairo – Badr Directorate

1 (A) Choose the correct answer:

1. The organ responsible for pain when your hands touch spines is .....
   (a) nerves (b) brain (c) eyes
2. The thick white fur is an adaptation in ..... .
   (a) panther chameleon (b) polar bear (c) fennec fox
3. The book that put on the table stores .....energy.
   (a) potential (b) light (c) kinetic

(B) What happen if:

- Two cars move in the same direction colloid?

.....

2 (A) Cross out the odd word of the following:

- Long ear in fennec fox - long neck in giraffe - hiding lizard between rocks.

(B) Give a reason for:

- The moon is not considered a source of light.

.....

(C) Find the speed of the car that covers 300 km in 3 hours.

.....

3 (A) Complete the following:

- The nervous system includes ..... and ..... .

(B) What's meant by:

- Friction? .....

(C) Which of the following shows how can light reflect on a mirror?

.....

.....

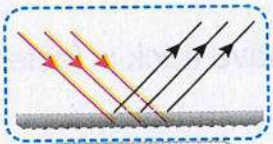


Figure (A)

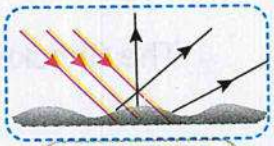


Figure (B)

Model 5 Giza – 6th October Directorate

1 (A) Choose the correct Answer:

1. Dolphin depends on their sharp sense of ..... to get food.
   ⓐ sight ⓑ taste ⓒ smell ⓓ hearing
2. The presence of thick white fur is an adaptation in..... .
   ⓐ polar bear ⓑ forest bear ⓒ desert lizard ⓓ bat
3. Paper and wood are ..... materials.
   ⓐ opaque ⓑ shiny ⓒ liquid ⓓ gases

(B) Write one example for:

- A form of potential energy. .....

2 (A) Put (✓) or (✗) on the following statement:

- Digestion process starts in mouth. ( )

(B) What happen if:

1. Fennec fox has short ear?

.....

.....

2. If the body moves down the slide?

.....

.....

3 (A) Cross out the odd word:

- Spinal cord – Lungs – Nerves – Brain (.....)

(B) Give reason for:

1. Acacia tree has very long trunk.

.....

.....

2. The Shockwave truck is faster than the normal truck.

.....

.....

Model 6 Qalyobia – Banha Directorate

1 (A) Choose the correct Answer:

1. Polar bears have a white fur to ..... .
   ⓐ live in desert ⓑ see in dark
   ⓒ hide from predator or their prey ⓓ live in forests
2. Ants communicate with each other using ..... .
   ⓐ sight ⓑ smell ⓒ touch ⓓ taste
3. Which of the following materials reflect light best ..... .
   ⓐ wood ⓑ cloth ⓒ mirrors ⓓ rock

(B) Write the scientific term of each of the following:

- A force that causes objects move toward you. (.....)

2 (A) Correct the underlined word:

- An organ that breaks down food to nutrients is stomach. (.....)

(B) Give reason for the following:

- Egyptian jerboa can jump for long distance.

.....

(C) What happens if:

- A book is transfered a book from the ground to table?

(According to the potential energy)

.....

3 (A) Put (✓) or (✗) on the following statements:

- Rough objects reflect light better than smooth ones. ( )

(B) Mention each of the following:

1. The name of organ that contract and relax in respiration process.

.....

2. Two forms of kinetic energy.

.....

Model 7 Alexandria – East Directorate

1 (A) Choose from column (B) what suits them from column (A):

Column (A)	Column (B)
1. Smell	ⓐ The force that tries to slow or stop a moving object.
2. Friction	ⓑ A force that moves an object away from you.
3. Carbon dioxide	ⓒ Ants use it to communicate.
	ⓓ A gas produced by respiration.

1. ..... 2. ..... 3. .....

(B) Write the scientific term of each of the following statements:

- It is the ability to do work or to make a change. (.....)

2 (A) Put (✓) or (✗) on the following statements:

- Red and green traffic lights are codes. ( )

(B) Give a reason for:

- Glass is a transparent material.

.....

(C) Compare between the following (one example for each one):

Behavioral Adaptation	Structural Adaptation
.....	.....
.....	.....

3 (A) Cross the odd word:

- Stomach – Lung – Mouth – Large intestine (.....)

(B) Mention safety means used during collision of cars:

.....

(C) Correct the underlined word:

- Kinetic energy is the energy stored inside the body. (.....)

Model 8 Dakahlia – Educational Directorate

1 (A) Choose the correct Answer:

1. ..... pass the food from pharynx to stomach.
   ⓐ Esophagus ⓑ Stomach ⓒ Trachea ⓓ Alveoli
2. All of the following are components of the nervous system, except .....
   ⓐ spinal cord ⓑ heart ⓒ nerves ⓓ brain
3. ..... is one of the behavioral adaptations that helps the animal protect itself from enemies.
   ⓐ camouflage ⓑ extinction ⓒ immigration ⓓ reproduction

(B) Study the following picture, and then answer the following questions:

1. Are the forces on both sides balanced or unbalanced?.



.....

2. In which direction will the rope move? (Right or left).

.....

2 (A) Put (✓) or (✗) on the following statements:

- Bats use their sense of smell to avoid dangers. (.....)

(B) Answer the following:

1. **Compare** between transparent and opaque objects.

.....

2. **Classify** the following energies into kinetic and potential:
   - Light – Chemical – Thermal – gravitational
3. **Give** one function to the airbags: .....

3 (A) Correct the underlined word:

- Exhale air carries oxygen. (.....)

(B) Answer the following:

1. **Determine the type of adaptation in the following.**
   ⓐ Thick, white fur in the polar bear ⓑ Fennec fox lives in burrows
2. **Calculate the speed of the train that covers 600km in a time 6 hours.**

.....

3. **Which of the following consumes less fuel a truck or small car?**

.....

Model 9 Port Said – Porfouad Directorate

1 (A) Choose the correct answer:

1. Fennec fox has ..... to enable blending in the desert.
   ⓐ dark colored fur ⓑ thick white fur
   ⓒ sandy colored fur ⓓ black colored fur
2. ..... tree grow in salt water.
   ⓐ Kapok ⓑ Palm ⓒ Mangrove ⓓ Acacia
3. The lungs are organ in the ..... system.
   ⓐ respiratory ⓑ digestive ⓒ circulatory ⓓ nervous

(B) Mention the type of force:

- Forces that pulls objects down toward the Earth.

.....

2 (A) Put (✓) or (✗) on the following statement:

- Egyptian jerboa depends on echolocation to find food. ( )

(B) Give reasons for the following:

1. The moon is not a source of light.

.....

2. The larger body in the mass causes more damage during collision.

.....

3 (A) Write the scientific term:

- It is the organ affected by light and responsible for vision. (.....)

(B) What happens when:

1. Human lungs are replaced by gills?

.....

2. Pressing the brakes of the car?

.....

Model 10 Matrouh – Educational Directorate

1 (A) Put (✓) or (✗) on the following statement:

1. Small intestine from the important organs in the respiratory system. ( )
2. Firefly beetles communicate by the sense of smell. ( )
3. Brain is the main control center in the human body. ( )

(B) What happens if:

- The speed of object increases? (According to the kinetic energy)

.....

2 (A) Choose the correct answer:

- All of the following are forms of kinetic energy expect the .....

ⓐ sound ⓑ light ⓒ food ⓓ electricity

(B) Complete the following statement:

1. Panting in fennec fox is considered as ..... adaptation, while long ears is considered as ..... adaptation.
2. We can identify the colors by using ..... sense, while we can differentiate between smooth and rough things by ..... sense.

3 (A) Write the scientific term:

- It is the force that you make to move objects away from you. (.....)

(B) Give reasons for:

1. The moon appears bright although it is not source of light.

.....

2. Electric lamp produces different types of energy.

.....

PONY Final Exams Model Answers

Model Exam 1

Q1 **(A)** light energy

(B) 1 Gravity. 2 Speed.
3 Camouflage. 4 Nervous system.

Q2 **(A)** ✗

(B) 1 Airbags 2 trachea
3 Shadow – opaque 4 thermal

Q3 **(A)** 1 a 2 d

(B) 1 To resist water waves.
2 Due to friction force between the ball and the ground that slows down the ball's movement.
3 Because it doesn't emit its own light, but it reflects the sunlight falling on it.

Q4 **(A)** 1 c 2 a

(B) 1 Electrical energy is changed into thermal energy.
2 You withdraw your hand quickly as a reflex action.

(C) Figure (1), because the two cars are moving in opposite directions.

Model Exam 2

Q1 **(A)** ✗

(B) 1 The chest size decreases, and carbon dioxide is expelled outside the body.
2 They can't hunt at night.
3 The object stays static and doesn't move.
4 It produces a chemical reaction inside its body to light up and attract a mate.

Q2 **(A)** Fish

(B) 1 Light. 2 Penguin.

(C) 1 It has a thick fur to keep its body warm, and the white fur to blend in with snow to sneak up on its prey.
2 To slow down their movement.

Q3 **(A)** 1 Seatbelt. 2 Airbag.

(B) 1 Transparent materials.
2 Kinetic energy.
3 Owl.

Q4 **(A)** 1 d 2 c

(B) 1 behavioral – structural.
2 light – thermal.
3 wider.

Model Exam 3

Q1 **(A)** d

(B) 1 nurse – scout
2 seatbelts – forward
3 mangrove – roots
4 chemical – potential

Q2 **(A)** Pulling force

(B) 1 A long taproot helps acacia tree to search for water, while the buttress root fixes the kapok tree firmly in soggy soil.
2 Because some of the kinetic energy is converted into sound energy.

(C) 1 It won't have an excellent night vision, so it can't hunt at night.
2 Its potential energy decreases.

Q3 **(A)** 1 ✗ 2 ✓

(B) 1 Energy. 2 Brain.
3 Night vision goggles.

Q4 **(A)** 1 Dolphins 2 Chemical energy

(B) v = d ÷ t = 500 ÷ 5 = 100 km/hr.

(C) 1 Because it is a transparent material.

2 Sheet (b) is a smooth surface, because it reflects light rays in one direction.

Model Exam 4

Q1 (A) ✗

(B) 1 Because they respire oxygen gas from water and air.

2 To grip sand when it jumps.

3 Because electrical energy is converted into kinetic and sound energies.

(C) unbalanced – left

Q2 (A) Esophagus

(B) 1

P.O.C	Kinetic energy	Potential energy
Affecting factors	1 Object's mass 2 Object's speed	1 Object's mass 2 Object's height from the ground

(C) 1 It stores potential energy.

2 It returns back in the form of echo waves, so the dolphin can locate the fish.

Q3 (A) 1 Structural adaptation.

2 Behavioral adaptation.

(B) 1 Wrecking ball. 2 Friction force.

3 Nervous system.

Q4 (A) 1 d 2 b

(B) 1 Panther chameleon.

2 Mirror.

(C) v = d ÷ t = 450 ÷ 3 = 150 km/hr.

Model Exam 5

Q1 (A) b

(B) 1 potential – kinetic 2 fat – feathers

3 low-pitched , warm

4 light , mirror-like membrane

Q2 (A) Wood

(B) 1 Echolocation. 2 Work.

(C) 1 It keeps driver and passengers from moving forward when the car stops suddenly.

2 It sends codes in the form of flashes of light to tell sailors where they are.

Q3 (A) 1 ✓ 2 ✗

(B) 1 Because the opaque object doesn't allow light to pass through.

2 To help it jump for long distances and escape from danger.

3 To hold tightly on tree branches.

Q4 (A) 1 c 2 b

(B) 1 The speed of the bike decreases gradually until it stops.

2 Chemical energy is converted into light energy and thermal energy.

(C) Car (B), because the angle of inclination of the ramp increases, the speed of the car moving on it increases.

Model Exam 6

Q1 (A) Polar bear

(B) 1 Because kinetic energy is changed into thermal energy.

2 To search for prey in all directions.

(C) 1 Force. 2 Sources of light.

Q2 (A) Speed

(B)

P.O.C	Inhalation process	Exhalation process
Movement of diaphragm	It contracts and moves downward.	It expands and moves upward.
The air is rich in	Oxygen gas	Carbon dioxide gas

(C) 1 Bat. 2 Egyptian jerboa.

Q3 (A) 1 ✗ 2 ✗

(B) 1 Light rays are reflected in one direction.

2 Its potential energy increases.

(C) It is the force exerted when objects rub against each other.

Q4 (A) 1 a 2 d

(B) 1 sight – smell 2 mass – speed

(C) brown – structural

Model Exam 7

Q1 (A) a

(B) 1 bronchi – trachea 2 distance – time

3 brain – nerves 4 pulling – gravity

Q2 (A) Barbary fig

(B) 1 Kinetic energy. 2 Saliva.

3 Light energy. 4 Eye.

Q3 (A) 1 Arctic fox 2 Kinetic

(B) 1 To absorb large amount of sunlight.

2 Because they allow light to pass through.

3 Because its height from the ground increases.

Q4 (A) 1 a 2 c

(B) 1 It puffs up its body with air, opens its mouth widely and changes its scales color.

2 They are scattered and reflected in many directions.

(C) kinetic – potential

Model Exam 8

Q1 (A) Hearing

(B) 1 Because it becomes active at night.

2 Because when the car's speed increases, its kinetic energy increases causing exerting a great force during collision.

(C) 1 Oxygen gas. 2 Anus.

Q2 (A) Pulling force.

(B) 1

P.O.C	Acacia tree	Kapok tree
Habitat	Savannah grassland	Amazon rainforest
Shape of leaves	Tiny leaves with sharp spines.	Hand-shaped leaves with narrow parts.

2

P.O.C	Transparent materials	Opaque materials
Definition	They are the materials that allow most of light to pass through.	They are the materials that don't allow light to pass through.

(C) kinetic – increases

Q3 (A) 1 b 2 d

(B) 1 It mixes food with stomach acid and digestive juices and changes food into a soupy liquid.

2 It helps amphibians to extract oxygen gas directly from water.

(C) When the object's speed increases, its kinetic energy increases and vice versa.

Q4 (A) 1 Desert lizard 2 friction

(B) 1 Chemical energy is changed into thermal energy.

2 Soldier ants sent smelly messages to other ants to alert them.

3 Its speed decreases gradually until it stops.

Model Exam 9

Q1 (A) c

(B) 1 decreases – increases

2 skin – tongue

3 small intestine – liver

4 10

Q2 (A) equal to

(B) 1 To prevent animals from eating its leaves and fruits.

2 Because it is affected by balanced forces which are the pulling force of gravity and the pushing force of the table.

3 To communicate with each other to move from one place to another or to search for food.

(C) 1 Echolocation. 2 Echo waves.

Q3 (A) 1 b 2 c

(B) 1 The rope will move toward the team of the greater pulling force.

2 The blood moving up to the penguin's body would be cold causing it to freeze.

3 Potential energy is changed into kinetic energy.

Q4 (A)

Transparent materials	Opaque materials
Air – Glass	Carton – Metal

(B) 1 Diaphragm. 2 Gravity.

3 Friction force.

Model Exam 10

Q1 (A) Saliva

(B) 1 Because they help fish to get oxygen gas from water.

2 Because they have shape senses of hearing and smelling.

3 To light up their bodies to communicate with each other.

4 Because the kinetic energy of the ball transfers to the goal net during collision.

Q2 (A) b

(B) 1

P.O.C	Arctic fox	Fennec fox
Habitat	Tundra desert	Hot desert
Size of ears	Short ears	Extra-large ears

(C) 1 It absorbs water from undigested food.

2 It carries messages from the brain to all body parts and vice versa.

Q3 (A) 1 c 2 a

(B) 1 Code. 2 Motion.

3 Alveoli.

Q4 (A) 1 ✓ 2 ✗

(B) 1 You will stop at once.

2 It causes more severe damage.

3 A shadow of the object is formed on the wall.

Governorate Exams Model Answers

Model ① Cairo - New Cairo Directorate

Q1 (A) 1 ✗ 2 ✗ 3 ✓

(B) The chemical energy stored in natural gas changes into thermal energy.

Q2 (A) b

(B) 1 To communicate with each other to attract mates to reproduce or to warn off predators.

2 Because seat belt keeps the driver and passengers from moving forward when the car stops suddenly.

Q3 (A) Code.

(B) 1 a- Behavioral b- Structural

2 a- Potential b- Kinetic

Model ② Cairo – Ain shams Directorate

Q1 (A) 1 c 2 a

(B) 1 Seatbelt 2 Airbag

Q2 (A) ✓

(B) Figure (b) because wooden spoon scatters light rays in different direction.

(C) Speed = Distance ÷ Time

= 450 ÷ 3 = 150 km/h.

Q3 (A) Reaction time.

(B) 1 Because it is hard to find food in hot desert or tundra desert so they adapt and eat insects, fruit, plant roots to survive.

2 Because friction slows it down until it stops.

Model ③ Cairo – Al shorouk Directorate

Q1 (A) 1 b 2 d 3 a

(B) Energy.

Q2 (A) structural

(B) 1 Seatbelt keeps the driver and passengers from moving forward when the car stops suddenly.

2 A wrecking ball used to collide walls of a building to knock down walls or parts of buildings.

Q3 (A) ✗

(B) 1 thin nylon 2 kinetic

Model ④ Cairo – Badr Directorate

Q1 (A) 1 b 2 b 3 a

(B) The damage would be less severe.

Q2 (A) Hiding lizard between rocks

(B) Because it reflects sunlight.

(C) Speed = Distance ÷ Time

Speed = 300 ÷ 3 = 100 km/h.

Q3 (A) brain and spinal cord.

(B) It is the force that is exerted when objects rub against each other.

(C) Figure (A).

Model ⑤ Giza – 6th October Directorate

Q1 (A) 1 d 2 a 3 a

(B) Gravitational potential energy

Q2 (A) ✓

(B) 1 It cannot cool its body.

2 Potential energy changes into kinetic energy.

Q3 (A) Lungs.

(B) 1 To store water. – To prevent animals from reaching its leaves to feed on.

2 Because the Shockwave truck has three jet engines.

Model ⑥ Qalyobia – Banha Directorate

Q1 (A) 1 c 2 b 3 c

(B) Pulling force

Q2 (A)small intestine

(B)Because it has long hind legs.

(C)Its potential energy increases.

Q3 (A)✗

(B) 1 Diaphragm

2 Light energy, Sound energy

Model ⑦ Alexandria – East Directorate

Q1 (A) 1 c 2 a 3 d

(B)Energy.

Q2 (A)(✓)

(B)Because glass allows light to pass through it and things can be seen through it.

(C)

Behavioral Adaptation	Structural Adaptation
Fennec fox pants like dog.	Fennec fox large ears.

Q3 (A)Lung

(B) 1 Seat belt 2 Airbag

(C)Potential

Model ⑧ Dakahlia – Educational Directorate

Q1 (A) 1 a 2 b 3 a

(B) 1 Unbalanced force 2 Right

Q2 (A) ✗

(B) 1

Transparent objects	Opaque objects
They are objects that allow light to pass through.	They are objects that don't allow light to pass through.
Example: - air - water	Example: rocks - wood

2 Kinetic energy: light – thermal

Potential energy: Chemical – Gravitational

3 Airbags slow the speed of the driver's motion forward. – Absorb the energy of the passengers on collision.

Q3 (A)Carbon dioxide

(B) 1 a-Structural adaptation

b-Behavioral adaptation

2 Speed = Distance ÷ Time = 600 ÷ 6 = 100 km/h.

3 Small car

Model ⑨ Port said – Porfouad Directorate

Q1 (A) 1 c 2 c 3 a

(B) Gravity (pulling force)

Q2 (A)✗

(B) 1 Because it reflects sunlight.

2 Because when the mass of an object increases, its kinetic energy increases.

Q3 (A)Eye

(B) 1 Humans could respire oxygen which dissolve in water.

2 The speed of car decreases until it stops.

Model ⑩ Matrouh – Educational Directorate

Q1 (A) 1 ✗ 2 ✗ 3 ✓

(B) Its kinetic energy increases

Q2 (A)c

(B) 1 behavioral - structural

2 sight - touch

Q3 (A) Pushing force.

(B) 1 Because it reflects sunlight.

2 Because it produces light energy and thermal energy.

حمل الآن

مجانا وحصريا

امتحانات رقم (3)

الترم الاول

ذاكرولى
RaNia SaYed

حمل الان حصريا

2025

Model (1)

15 Marks

1 (A) Choose the correct answer:

1 Digestion starts in ..... with the help of ..... .

a) the mouth, acids
b) the stomach, acids
c) the mouth, saliva
d) the small intestine, pancreatic juices

2 Which of the following sentences helps bats survive in their habitats?

a) Echolocation helps bats communicate with each other.
b) Echolocation helps bats find their way and locate objects.
c) Echolocation helps bats do camouflage in their habitat.
d) Echolocation helps bats fly faster through air.

3 The wings of fireflies flash due to the ..... which occurs inside their bodies.

a) biological reaction b) chemical reaction c) physical activity d) light reaction

(B) Answer the following questions:

– At the same height a 10 kg box of apples stores more potential energy than a 5 kg box of oranges. **Why?**

.....

2 (A) Complete the following sentence:

– The received sound messages are transmitted from the ..... to the ..... through nerves.

(B) Answer the following questions:

1 Shadows are formed behind our bodies when the light falls on them. **Explain**.

.....

.....

2 What is the importance of the battery in a toy car?

.....

3 (A) Write the scientific term:

– The time taken by a jerboa to respond to danger. (.....)

(B) Answer the following questions:

1 Calculate the speed of a train that covers 600 km in a time of 10 hours.

.....

2 Which one reflects the light rays in one direction, mirror or wood and why?

.....

Model (2)

15 Marks

1 (A) Choose the correct answer:

1. The roots of mangroves trees help it to ..... .
   a) stand strong against the wind
   b) reach the underground water
   c) soak up much sunlight
   d) stand strong against strong water waves
2. Which of the following sequences to kick a ball on the floor is correct?
   a) Eyes → Nerves → Legs → Brain
   b) Legs → Brain → Nerves → Eyes
   c) Brain → Legs → Nerves → Eyes
   d) Eyes → Nerves → Brain → Legs
3. The body of a chameleon is covered with colored scale ..... .
   a) to hold tightly on the branches
   b) to avoid the scorching sun
   c) to search for food
   d) to hide among the colorful flowers

(B) Answer the following question:

– Which kid is faster, and why?

Kid (A)
Covers 10 m
in 2 seconds



Kid (B)
Covers 8 m
in 2 seconds

.....

2 (A) Complete the following sentence from the words between the two brackets:

– Nurse ants depend on the sense of ..... to warn scout ants that food is low.

(sight - smell)

(B) Answer the following questions:

1. When a kid pushes a swing, work is done. **Explain**.

.....

2. What is the difference between the inhaled air and the exhaled air?

.....

3 (A) Put (✓) or (✗):

- The nervous system works separately from the five senses. ( )

(B) What happens if ...?

1. The roller coaster slides from the top of the ramp. (Regarding the energy conversion)

.....

2. The small intestine is removed from the human body.

.....

.....

Model (3)

15 Marks

1 (A) Choose the correct answer:

1 What is the agama lizard's adaptation to survive in its desert habitat? .....

a) It finds shade during a hot sunny day.
b) It digs burrows to keep its body warm.
c) It has sandy-colored fur.
d) It searches for its food during day time.

2 Songs of humpback whales for mating are produced during .....

a) summer
b) winter
c) spring
d) fall

3 When the reaction time ..... , the chance to survive increases.

a) decreases
b) increases
c) is doubled
d) is not changed

(B) Answer the following questions:

– Calculate the speed of a car that travels 400 meters in 10 seconds.

.....

2 (A) Complete the following sentence from the words between the two brackets:

– Weaving of blood vessels around each other in penguin's feet is considered a ..... adaptation.

(structural – behavioral)

(B) Answer the following questions:

1 What happens if dolphins have weak sense of hearing.

.....

.....

2 Mention the importance of the seat belt in the vehicles during a car crash.

.....

3 (A) Cross out the odd word:

– Skin – Air – Iron – Cloth (.....)

(B) Answer the following questions:

1 Explain how fish respire under water.

.....

2 When a moving car crashes into a wall, it stops moving. Give a reason.

.....

.....

ALPWA Gen

Model (4)

15 Marks

1 (A) Correct the underlined word:

1. Diaphragm moves upwards during inhalation process. (.....)
2. Reflexes are controlled messages that we are barely aware of. (.....)
3. The moon gives off light. (.....)

(B) Give a reason for:

– When the roller coaster moves upwards, it stores more potential energy.

.....

2 (A) Choose the correct answer:

– Arctic fox has ..... .

a) white fur during winter, and short ears
b) long legs, and short ears
c) brown fur during summer, and long ears
d) brown fur during winter, and short ears

(B) Answer the following questions:

1. **How** the structural adaptation of the Egyptian Jerboa's long hind legs helps it survive.

.....

.....

2. In Newton cradle, some of the kinetic energy is lost. **Explain**.

.....

.....

3 (A) Complete the following sentence from the words between the two brackets:

– The arctic fox stays in burrows during ..... to stay warm. (day - night)

(B) Answer the following questions:

1. **What happens** if an egg falls from your hand. (Regarding the energy conversions)

.....

2. Stomach is an important organ in the digestive system. **Give a reason**.

.....

.....

Model (5)

15 Marks

1 (A) Choose the correct answer:

1. The organ that connects the throat with the stomach is ..... .

   a) mouth b) tongue c) esophagus d) small intestine

2. All the following are from the nocturnal animals' behavior, except ..... .

   a) looking for food at night to avoid extremely hot places

   b) food is only available at night

   c) relying on the night darkness to devour animals

   d) sleeping at night

3. Pushing and pulling forces are different in ..... .

   a) mass b) color c) direction d) energy

(B) Answer the following questions:

– What happens if a static ball is affected by unbalanced forces.

.....

2 (A) Cross out the odd word:

– Fuel – Compressed spring – Battery – Sunlight (.....)

(B) Answer the following questions:

1. The fishing cat's eyes seem to glow in the dark. **Explain**.

.....

.....

2. State the energy transformation when we rub our hands together.

.....

3 (A) Put (✓) or (✗):

– The brain needs to interpret and process an external signal in order to send the suitable responses.

(✓)

(B) Answer the following questions:

1. What happens when the angle of inclination of a ramp where a truck moves down increases. (Regarding the truck's speed and kinetic energy).

.....

2. The feet of the penguin don't freeze. **Give a reason**.

.....

.....

Model (1)

15 Marks

1 (A) Choose the correct answer:

1 Digestion starts in ..... with the help of ..... .

a) the mouth, acids
b) the stomach, acids
c) the mouth, saliva
d) the small intestine, pancreatic juices

2 Which of the following sentences helps bats survive in their habitats?

a) Echolocation helps bats communicate with each other.
b) Echolocation helps bats find their way and locate objects.
c) Echolocation helps bats do camouflage in their habitat.
d) Echolocation helps bats fly faster through air.

3 The wings of fireflies flash due to the ..... which occurs inside their bodies.

a) biological reaction **b) chemical reaction** c) physical activity d) light reaction

(B) Answer the following questions:

– At the same height a 10 kg box of apples stores more potential energy than a 5 kg box of oranges. **Why?**

Because by increasing the mass of the object, the stored potential energy increases.

2 (A) Complete the following sentence:

– The received sound messages are transmitted from the **sensory organs** to the **brain** through nerves.

(B) Answer the following questions:

1 Shadows are formed behind our bodies when the light falls on them. **Explain**.

Our bodies are opaque objects that don't allow light to pass through them, so shadows are formed behind them.

2 What is the importance of the battery in a toy car?

It converts the chemical energy into electrical energy to operate the toy car.

3 (A) Write the scientific term:

– The time taken by a jerboa to respond to danger. (**Reaction time**)

(B) Answer the following questions:

1 Calculate the speed of a train that covers 600 km in a time of 10 hours.

Speed of the car $= \frac{\text{Distance}}{\text{Time}} = \frac{600}{10} = 60$ **km/h**

2 Which one reflects the light rays in one direction, mirror or wood and why?

Mirror because it is shiny and smooth.

Model (2)

15 Marks

1 (A) Choose the correct answer:

1 The roots of mangroves trees help it to ..... .

a) stand strong against the wind
b) reach the underground water
c) soak up much sunlight
d) stand strong against strong water waves

2 Which of the following sequences to kick a ball on the floor is correct?

a) Eyes → Nerves → Legs → Brain
b) Legs → Brain → Nerves → Eyes
c) Brain → Legs → Nerves → Eyes
d) Eyes → Nerves → Brain → Legs

3 The body of a chameleon is covered with colored scale ..... .

a) to hold tightly on the branches
b) to avoid the scorching sun
c) to search for food
d) to hide among the colorful flowers

(B) Answer the following question:

– Which kid is faster, and why?

Kid (A)
Covers 10 m
in 2 seconds



Kid (B)
Covers 8 m
in 2 seconds

Kid (A), because she covers a longer distance in the same time.

2 (A) Complete the following sentence from the words between the two brackets:

– Nurse ants depend on the sense of ..... to warn scout ants that food is low.

(sight - **smell**)

(B) Answer the following questions:

1 When a kid pushes a swing, work is done. **Explain**.

Because the swing moves a distance when the force is applied on it.

2 What is the difference between the inhaled air and the exhaled air?

The inhaled air is rich in oxygen, while the exhaled air is rich in carbon dioxide.

3 (A) Put (✓) or (✗):

- The nervous system works separately from the five senses. (✗)

(B) What happens if ...?

1 The roller coaster slides from the top of the ramp. (Regarding the energy conversion)

The potential energy is converted into kinetic energy.

2 The small intestine is removed from the human body.

The digestion of food will not be completed, and the nutrients in the digested food will not be absorbed.

Model (3)

15 Marks

1 (A) Choose the correct answer:

1 What is the agama lizard's adaptation to survive in its desert habitat? .....

a) It finds shade during a hot sunny day. b) It digs burrows to keep its body warm.

c) It has sandy-colored fur. d) It searches for its food during day time.

2 Songs of humpback whales for mating are produced during .....

a) summer **b) winter** c) spring d) fall

3 When the reaction time ..... , the chance to survive increases.

a) decreases b) increases c) is doubled d) is not changed

(B) Answer the following questions:

– Calculate the speed of a car that travels 400 meters in 10 seconds.

Speed of the car $= \frac{\text{Distance}}{\text{Time}} = \frac{400}{10} = 40$ **km/h**

2 (A) Complete the following sentence from the words between the two brackets:

– Weaving of blood vessels around each other in penguin's feet is considered a ..... adaptation.

(**structural** – behavioral)

(B) Answer the following questions:

1 What happens if dolphins have weak sense of hearing.

They will not be able to hear the reflected echoes in the water, so they can't locate objects or directions.

2 Mention the importance of the seat belt in the vehicles during a car crash.

It prevents the driver or the passengers from moving forward during collision.

3 (A) Cross out the odd word:

– Skin – Air – Iron – Cloth (**Air**)

(B) Answer the following questions:

1 Explain how fish respire under water.

It extracts the dissolved oxygen in water by gills.

2 When a moving car crashes into a wall, it stops moving. Give a reason.

Because the wall applies a force to the car that is equal to the force of the car, but in the opposite direction, so the car stops.

Model (4)

15 Marks

1 (A) Correct the underlined word:

1. Diaphragm moves upwards during inhalation process. (**downwards**)
2. Reflexes are controlled messages that we are barely aware of. (**automatic**)
3. The moon gives off light. (**doesn't give off**)

(B) Give a reason for:

– When the roller coaster moves upwards, it stores more potential energy.

Because the potential energy increases by increasing the height away from the Earth's surface.

2 (A) Choose the correct answer:

– Arctic fox has ..... .

a) white fur during winter, and short ears
b) long legs, and short ears
c) brown fur during summer, and long ears
d) brown fur during winter, and short ears

(B) Answer the following questions:

1. **How** the structural adaptation of the Egyptian Jerboa's long hind legs helps it survive.

   – **It has strong hind legs that help it jump for long distances in a zigzag pattern to escape quickly from danger.**

2. In Newton cradle, some of the kinetic energy is lost. **Explain**.

   – **Some of the kinetic energy is lost in the form of thermal energy due to the friction between the balls and the air, and sound energy during the collision between the balls.**

3 (A) Complete the following sentence from the words between the two brackets:

– The arctic fox stays in burrows during **night** to stay warm. (day - night)

(B) Answer the following questions:

1. **What happens** if an egg falls from your hand. (Regarding the energy conversions)

   – **Potential energy is converted into kinetic energy.**

2. Stomach is an important organ in the digestive system. **Give a reason**.

   – **Because it mixes the food with acid, digestive juices, and the food usually stays for few hours until it is a soupy liquid.**

Model (5)

15 Marks

1 (A) Choose the correct answer:

1 The organ that connects the throat with the stomach is ..... .

a) mouth b) tongue **c) esophagus** d) small intestine

2 All the following are from the nocturnal animals' behavior, except ..... .

a) looking for food at night to avoid extremely hot places

b) food is only available at night

c) relying on the night darkness to devour animals

d) sleeping at night

3 Pushing and pulling forces are different in ..... .

a) mass b) color **c) direction** d) energy

(B) Answer the following questions:

– What happens if a static ball is affected by unbalanced forces.

– **It will move in the direction of the greater force.**

2 (A) Cross out the odd word:

– Fuel – Compressed spring – Battery – Sunlight (**Sunlight**)

(B) Answer the following questions:

1 The fishing cat's eyes seem to glow in the dark. **Explain**.

– **Because it has a mirror-like membrane on the back of its eyes which reflects the light rays that fall on it.**

2 State the energy transformation when we rub our hands together.

– **The kinetic energy is converted into thermal energy.**

3 (A) Put (✓) or (✗):

– The brain needs to interpret and process an external signal in order to send the suitable responses.

(✓)

(B) Answer the following questions:

1 What happens when the angle of inclination of a ramp where a truck moves down increases. (Regarding the truck's speed and kinetic energy).

– **Its speed and kinetic energy increases.**

2 The feet of the penguin don't freeze. **Give a reason**.

– **Because the blood vessels in its feet are weaved around each other, so the heat from the warm blood vessels is transferred to the cold blood vessels.**

حمل الآن

مجانا وحصريا

امتحانات رقم (4)

الترم الاول





مقدم مجاناً من قناة مستر ساينس على اليوتيوب

Mr.Science
Sherif Hawary

Model (1)

Q1.A - Choose the correct answer:

1-All the following living organisms have mirror like membrane except.....

a) snakes b) fishing cats

c) Dogs d) horses

2-The sensory organ of the dolphin helps It do all the following except ...

a. Surviving b. Searching for food c. Searching for water d. Protecting itself under water

3-Human activities and ball habits, can pollute.....of an ecosystem

A-Air and soil only B-soil and waterways only

C-air and waterways only D-air, soil and waterways

4-The force that is exerted when objects rub against each other

a)weight b)gravitational c)friction d)pressure

B-What is the type of adaptation in panther chameleon eyes?



.....

Q2-put (true) or (false)

1-Digestive system ends by anus (.....)

2-the ears of arctic fox are longer than those of fennec fox (.....)

3-The food gets broken down into nutrients in the small intestine (.....)

4-stomach connects esophagus with large intestine (.....)

5-food passes from mouth to stomach through a narrow tube known as small intestine (.....)

Q3.A-write the scientific term:

1-they are in the car airbags and allow them to deflate fast after collision (.....)

2-liquid used to move cars as it store chemical energy (.....)

3-a process where two objects or more crash in each other and energy transfer happen (.....)

4-a heavy steel ball swings on a cable and destruct buildings (.....)

5-safety equipment in cars prevent passengers from moving forward when car stop suddenly (.....)

Q3.B-Cross the odd word :

- **Penguin – Polar bear – snake – arctic fox**
- **Sound energy – light energy – thermal energy - chemical energy**

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Sherif Hawary

Model (2)

Q1. A- Put (×)or (√):

1-force is necessary to move or stop an object (.....)

2-the angel of the incline affects the speed of an object moving on it (.....)

3-the speed of the ball moving down change by changing the ramp height (.....)

4-all objects move at similar speed around us (.....)

B- Give reason gills are a unique structural adaptation in fish

---

Q2.correct the underlined word:

1-The moving balls of newton's cradle keeps their kinetic energy as time passes (.....)

2-When object move in a high speed it has a small amount of kinetic energy (.....)

3-The larger density of an object the more fuel it consumes (.....)

4-The speed of an object affects its potential energy (.....)

5-Airbags are made of thick wooden materials (.....)

Q3-A- choose the correct answer:

1-bull shark can live in.....

a) fresh water b)salty water c)both fresh and salty water

2-fennec fox has .....color fur

a) white b) black c) sandy

3-panther chameleon has .....feet

a) flat b) U-shaped c) V-shaped

4-fennec fox .....like dogs

a) white b) eat c) pants

5-All the following are organs of digestive system except.

a) Mouth b) nose c) stomach

Q3-B- What happen if :

- **firefly wants to attract a mate to reproduce.**

.....

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Model (3)

Q1) Complete

1-The speed of a roller coaster starts to move it gets energy from.....electric motors.....found in its beginning car which is operated by.....

2-If you have ability to push a chair, so you have.....

3-Any object will move, if it has ..... energy

4-in gas oven, ... energy changes into ..... energy

B-Mention the changes of energy when a skater begins to skate.

Q2)A- Cross out the odd word

1-Guitar- flashlight - radio - alarm bell

2-The sun - electric heater -match- radio

3-Electric mixer - electric fan -washing machine -alarm bell

4- Nose – mouth – small intestine – stomach

B-Give reason

1-Fuel Inside the car is similar to the food inside the human body

.....

2- The toy car moves after filling its spring, then let it to free.

.....

Q3)-Put (true) or (false)

1- All types of sharks live in fresh water (... ...)

2- Radio is operated by sound energy, and produces electric energy (.....)

3- When a moving object is affected by two opposite equal forces it will stop(.....)

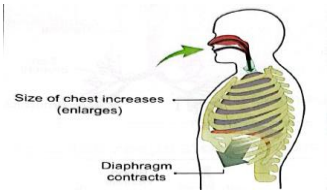
4- We eat food to obtain electric energy (.....)

5- Energy don't transfer from an object to another (.....)

B- From the opposite fig. answer the following questions

1- The figure refers to .....process

2- The diaphragm muscle will .....during this process



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Model (4)

Q1-choose the correct answer

1- A very big truck needs ..... to move

A-very small engine b) small engine c) very big engine d)no engine

`2-both of human and fish...

A) Can breathe in air **b)** Can breathe in water **c)** Use oxygen gas to breathe **d)** Use carbon dioxide to breathe)

3-Gills differs from lungs, in that gills.....

A) Take oxygen gas b) Expel carbon dioxide gas c) Extract oxygen from water d) Extract oxygen from air)

4--reading and writing are common types of communication in .....

A) human b) plants c) animals d) birds

5. Which of the following choices explain how the body reacts to the smell of food in the correct order?

a. The brain the nose the nerves b. The nose the brain - the nerves

c. The nerves the brain the nose d. The nose the nerves the brain

6. The organ that processes the information collected through the sense of sight is

a. The spinal cord b. The nerves C. The brain d. The eyes

Q2)A- Complete the following:

1. Some animals go out at night in their habitats to .....

2. .....is a sensory organ.

3. The .....transmit Information's from and to the brain.

4. to measure the speed of a moving car we need to divide the .....it travels over. ...Taken

B- Give reason

1- The blood vessels in penguin feet wave around each other

Q3)A- put (true)or(false)

1- To slow down the speed of the shockwave truck quickly, parachutes are used (.....)

2- Speaking is the only way of communication between people (.....)

3-The main difference between pulling and pushing forces in the direction of the force (...)

4-To open or close a door, we have to push or pull it (.....)

B-Look at the following photos, then complete:


Animal (1)


Animal (2)

1. The sharpest senses that animal (1) has are ...

3. The sharpest sense that animal (2) has is .....

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Model (5)

Q1)-Complete

1-The bicycle cannot move without a .....acting on it

2- .....from the plants that can survive in habitats that have shortage of water

3- The wall of the small intestine absorbs the digested food into your bloodstream through .....

4-The chair stands on the floor due to the pulling force of .....

5-To move anything from one place to another, you need to ..... it or.....

Q2)-Correct the underlined words

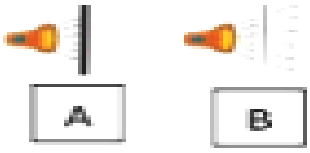
1-When you jump up, the force of friction pulls you back to the ground

2-If the car runs out of fuel, Its speed increases

3-The motion of a car is opposed by the gravity of air

4-Moving object stops when a force of the same amount is applied to it in the same direction

B:1-Look at the path of the light rays in pictures (A) - (B). Determine which of the two objects is opaque and which is transparent



(object) (A)..... **(object) (B).....**

Q3-choose the correct answer: -

1-by increasing speed of a ball travelling down ward its kinetic energy ...

a)increase b)decrease c)doesn't change d)become zero

2-a moving car travels a 100 meter distance in 5 seconds so its speed will be .....

a)10 m/sec b)15 m/sec c)20 m/sec d)5m/sec

3. To describe the delicious taste of a pedal of chocolate, we should use the sense of

a. Sight b. Smell c. Taste d. Touch

4. To describe the color of your school bag to your friend you should use the sense of

a. Sight b. Smell c. Taste d. Touch

5. Which of the following senses we use during watching a film on the TV?

a. Sight and taste b. Sight and smell c. Hearing and touch d. Sight and hearing

6-preesing the gas pedal of a car sends more .....to the engine

a)air b)fuel c)water d) Juice

B - Explain why :

-Leaves of plants that float above the surface of the water are so wide.

.....

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Model (6)

Q1:- Choose the correct Answer

1. To know if a cup of water is hot or cold, we need to use the sense of

a. Sight b. Smell c. Hearing d. Touch

2. Some animals go out at night in their habitats to .....

a. Search for air b. Search for predator c. Search for a prey d. Sleep In the open air

3. All of the following are sensory organs except the

a. Eyes b. Nose c. Skin d. Lungs

4. The nerves transmit Information's from and to the brain in the form of

a. Magnetic Impulse b. Electrical Impulse c. Light Impulse d. Sound Impulse

---

Q 2) Write the scientific term of each of the following

1- A reptile that can sense the body heat of its preys at night using a special part of its face (.....)

2-A property by which a bat can locate its prey Insects through the sounds reflected from them (.....)

3-An animal that can turn its head backwards and has a bowl-shaped face and large eyes (.....)

4-.A system that controls all the body functions and nerves are one of its parts(.....)

Q3)-Complete

1- when you push a table on the floor the .....transfer from your body to table

2- When two cars move on the same road car (A) its speed 10 m/s while car (B) its speed 30 m/s , this means that car .....move longer distance than car .....at same time

3- When you kick the ball standing in land, it starts to .....

4- .....objects allow light rays to pass through them

5- The fishing cat can hunt at night depending on the sense of .....while snake can hunt at night depending on its ability to sense .....which comes out from its .....body

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Model (7)

Q 1) Put (×) or (√)

1. The sensory receptors in the eyes receive the sounds produced by a radio and send it to the brain ( )
2. Animals that are active during the daytime are called the nocturnal animals ( )
3. Some animals prefers hunting during the night that can hunting during the day ( )

B) What is structural adaption of Jerboa?

.....

.....

Q2.complete the following:

1- To describe the delicious piece of chocolate, we should use the sense of.....

2-the speed of a car on a highway is .....of the car in a traffic jam

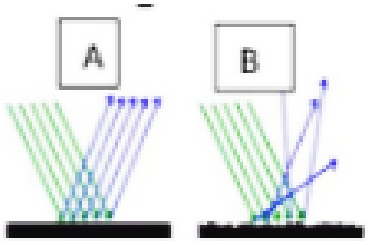
3-If a truck moves in a high speed so it has more.....energy.

4-when objects collide with each other..... Is transferred between them

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Q3) Answer the following questions :

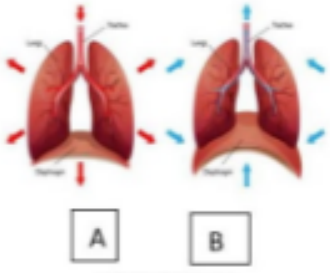
1- Which of the following surfaces represents the reflection of light rays from a wooden spoon - and what is the reason?



2- look at the following two figures. Identify the name of each of the two processes in Figures

A- .....

B- .....



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Model (8)

Q 1) Put (×) or (√)

1-The body senses and system work separately when animals run away from their enemies(...)

2-The Egyptian jerboa lvies in forests. (.....)

3-A jerboa has large ears which help in sensing the snakes. (.....)

4-The Egyptian jerboa can jump for long distances depending on its long hind legs. (.....)

5-Hopping of the jerboa in zigzag pattern to run away from danger is considered as a structural(.....)

6-Amphibians includes frog, starred agama and salamanders (.....)

7-Arctic foxes and amphibians cannot found in the same habitat (.....)

8-Frogs have a small digestive system as they are small reptiles (.....)

9-Clean water and air are very important for digestion process in amphibians (.....)

10-seatbelt enable driver to see the road

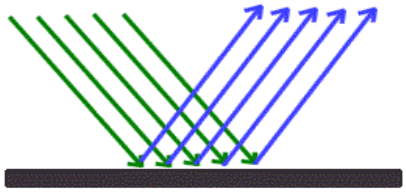
11-fast moving objects can be exposed to less damage than slow ones (.....)

12-a small object on a low speed has a big amount of kinetic energy (.....)

13-when the mass of object increase in need less force to move (.....)

14--slower and smaller objects have more kinetic energy than that of larger faster (.....)

Q2) What is the type of reflection? Why?



Q3)-Correct the underlined words

1-When you jump up, the force of friction pulls you back to the ground (.....)

2-If the car runs out of fuel, Its speed increases (.....)

3-The motion of a car is opposed by the gravity of air(.....)

4-Moving object stops when a force of the same amount is applied to it in the same direction (....)

5-The rope in the tug-of-war game may not move towards any team, if both teams push with the same force (.....)

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Model (1)

Q1.Choose the correct answer:

1-All of the following living organisms have mirror like membrane except.....

a) snakes b) fishing cats

c) Dogs d) horses

2-The sensory organ of the dolphin helps It do all the following. except ...

a. Surviving b. Searching for food c. Searching for water d. Protecting itself under water

3-Human activities and bad habits, can pollute.....of an ecosystem

A-Air and soil only B-soil and waterways only

C-air and waterways only D-air, soil and waterways

4-The force that is exerted when objects rub against each other

a)weight b)gravitational c)friction d)pressure

B-What is the type of adaptation in panther chameleon eyes?

structural adaptation

Q2-put (true) or (false)

1-Digestive system ends by anus (t)

2-the ears of arctic fox are longer than those of fennec fox (.F..)

3-The food gets broken down into nutrients in the small intestine (..T..)

4-stomach connects esophagus with large intestine (F)

5-food passes from mouth to stomach through a narrow tube known as small intestine (..F.)

Q3.write the scientific term:

1-they are in the car airbags and allow them to deflate fast after collision (holes.)

2- liquid used to move cars as it store chemical energy (FUEL)

3-a process where two objects or more crash in each other and energy transfer happen (COLLISION)

4-a heavy steel ball swings on a cable and destruct buildings (wrecking ball)

5-safety equipment in cars prevent passengers from moving forward when car stop suddenly (Seat belt)

Q3.B-Cross the odd word :

- **Penguin – Polar bear – snake – arctic fox**
- **Sound energy – light energy – thermal energy - chemical energy**

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Model (2)

Q1. Put (×)or (√):

1-force is necessary to move or stop an object(.√.)

2-the angel of the incline affects the speed of an object moving on it (.√.)

3-the speed of the ball moving down change by changing the ramp height(.√.....)

4-all objects move at similar speed around us (x)

B- Give reason because it allows fish to live and breath under water

---

Q2.correct the underlined word:

1-the moving balls of newton's cradle keeps their kinetic energy as time passes(mechanical)

2-when object move in a high speed it has a small amount of kinetic energy (P.E)

3-the larger density of an object the more fuel it consumes (mass - speed)

4-the speed of an object affects its potential energy (K.E)

5-airbags are made of thick wooden materials (THIN NYLON)

Q3-choose the correct answer:

1-bull shark can live in.....

a)fresh water b)salty water c)both fresh and salty water

2-fennec fox has .....color fur

a)white b)black c)sandy

3-panther chameleon has .....feet

a)flat b)U-shaped c)V-shaped

4-fennec fox .....like dogs

a)white b) eat c) pants

5-All the following are organs of digestive system except.

a) Mouth b) nose c) stomach

Q3-B- What happen

- **firefly wants to attract a mate to reproduce.**

  They use their wings to form different flash pattern

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Model (3)

Q1)A- Complete

1-The speed of a roller coaster starts to move, it gets energy from. Motors.....found in its beginning car which is operated by ....ELECTRICITY

2-If you have ability to push a chair, so you have Energy

3-Any object will move, if it has .kinetic energy

4-in gas oven, chemical energy changes into heat energy

B--When a skater begins to skate, his stored P.E changes into K.E energy

Q2) Cross out the odd word

1-Guitar - flashlight - radio - alarm bell

2-The sun-electric heater-match-radio

3-Electric mixer- electric fan - washing machine-alarm bell

4- Nose – mouth – small intestine – stomach



Give reason

1-Fuel Inside the car is similar to the food inside the human body

BEC. Both of them burn produces heat and kinetic energy

2- The toy car moves after filling its spring, then let it to free.

BEC. Potential energy stored change into kinetic energy

Q3)-Put (true) or (false)

1- All types of sharks live in fresh water (F)

2- Radio is operated by sound energy, and produces electric energy (F)

3- When a moving object is affected by two opposite equal forces it will stop(...T..)

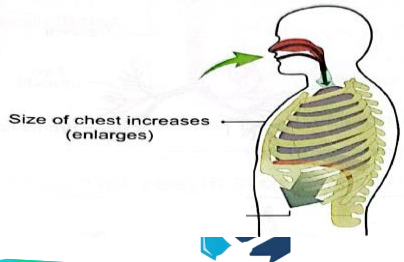
4- We eat food to obtain electric energy (F)

5- Energy don't transfer from an object to another (F)

B- From the opposite fig. answer the following questions

1- The figure refers to Inhalation process

2- The diaphragm muscle will Contract during this proces



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Model (4)

Q1-choose the correct answer

1- A very big truck needs ..... to move

A-very small engine b) small engine c) very big engine d)no engine

2-both of human and fish...

A) Can breathe in air b) Can breathe in water c) Use oxygen gas in breathe d) Use carbon dioxide to breathe i

3-Gills differs from lungs, in that gills.....

A) Take in oxygen b) Expel out carbon dioxide gas c) Extract oxygen from water d) Extract oxygen from air

4-reading and writing are common types of communication in .....

A) human b) plants c) animals d) birds

5. Which of the following choices explain how the body reacts to the smell of food in the correct order?

a. The brain the nose the nerves b. The nose the brain - the nerves

c. The nerves the brain the nose d. The nose the nerves the brain

6. The organ that processes the information collected through the sense of sight is

a. The spinal cord b. The nerves C. The brain d. The eyes

Q2) Complete the following:

1. Some animals go out at night in their habitats to **catch preys**
2. **nose** is a sensory organ.
3. The **nerves** transmit Information's from and to the brain.
4. to measure the speed of the moving car we need to divide the **Distance** it travels over the **time**.... Taken

B- Give reason

-**To warm each other for keeping its toes from freezing**

Q3) put (true)or(false)

1- To slow down the speed of the shockwave truck quickly, parachutes are used (..**T**..)

2-Speaking is the only way of communication between people (**F**..)

3-The main difference between pulling and pushing forces in the direction of the force (.**T**)

5-To open or close a door, we have to push or pull it (...**T**..)

B-Look at the following photos, then complete:

1. **Smell and hearing**
2. **hearing**



Animal (1)



Animal (2)

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Model (5)

Q1)-Complete

1-The bicycle cannot move without a Force. Acting on it

2- Acacia from the plants that can survive in habitats that have lackage of water

3- Tiny blood vessels

4-The chair stands on the floor due to the pulling force of .gravity

5-To move anything from one place to another, you need to push it or. Pulling

Q2)-A - Correct the underlined words

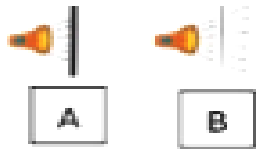
1-When you jump up, the force of friction pulls you back to the ground (gravity)

2-If the car runs out of fuel, Its speed increases (decrease)

3-The motion of a car is opposed by the gravity of air (friction)

4-Moving object stops when a force of the same amount is applied to it in the same direction (opposite)

B - Look at the path of the light rays in pictures (A) - (B). Determine which of the two objects is opaque and which is transparent



(object) (A). is opaque **(object) (B) is transparent**

Q3-choose the correct answer:-

1-by increasing speed of a ball travelling down ward its kinetic energy ...

a)increase b)decrease c)doesn't change d)become zero

2-a moving car travels a 100 meter distance in 5 seconds so its speed will be .....

a)10 m/sec b)15 m/sec c)20 m/sec d)5m/sec

3. To describe the delicious taste of a pedal of chocolate, we should use the sense of

a. Sight b. Smell c. Taste d. Touch

4. To describe the color of your school bag to your friend you should use the sense of

a. Sight b. Smell c. Taste d. Touch

5. Which of the following senses we use during watching a film on the TV?

a. Sight and taste b. Sight and smell c. Hearing and touch d. Sight and hearing

6-preesing the gas pedal of a car sends more .....to the engine

a)air b)fuel c)water d) Juice

B - Explain why :

-Leaves of plants that float above the surface of the water are so wide.

To absorb large amount of sun light

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Model (6)

Q1:- Choose the correct Answer

1. To know if a cup of water is hot or cold, we need to use the sense of

a. Sight b. Smell c. Hearing d. Touch

2. Some animals go out at night in their habitats to .....

a. Search for air b. Search for predator c. Search for a prey d. Sleep In the open air

3. All of the following are sensory organs except the

a. Eyes b. Nose c. Skin d. Lungs

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a. Magnetic Impulse b. Electrical Impulse c. Light Impulse d. Sound Impulse

---

Q 2) Write the scientific term of each of the following

1- A reptile that can sense the body heat of its preys at night using a special part of its face (snake..)

2-A property by which a bat can locate its prey Insects through the sounds reflected from them (echolocation)

3-An animal that can turn its head backwards and has a bowl-shaped face and large eyes (owl)

4-.A system that controls all the body functions (nervous system)

Q3)-Complete

1-when you push a table on the floor the energy transfer from your body to table

2- When two cars move on the same road car (A) its speed 10 m/s while car (B) its speed 30 m/s , this means that car B..move longer distance than car A at same time

3- When you kick the ball standing in land, it starts to Move

4- Transparent objects allow light rays to pass through them

5- The fishing cat can hunt at night depending on the sense of sight.while snake can hunt at night depending on its ability to sense heat.which comes out from its prey body

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مقدم مجاناً من قناة مستر ساينس على اليوتيوب

Model (7)

Q 1) Put (×) or (√)

1. The sensory receptors in the eyes receive the sounds produced by a radio and send it to the brain(x)
2. Animals that are active during the daytime are called the nocturnal animals (x)
3. Some animals prefers hunting during the night that cannot hunting during day (√)

B) What is structural adaption of Jerboa?

It has large ears to listen predator

It has long hind legs to can jump long distance

Mr.Science
Sherif Hawary

Q2.complete the following:

1- To describe the delicious piece of chocolate, we should use the sense of taste

2-the speed of a car on a high way is .more than .. the car in a traffic jam

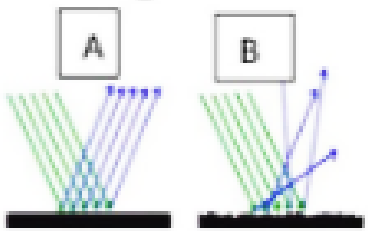
3-If a truck moves in a high speed so it has more Kinetic energy.

4-when objects collide with each other energy Is transferred between them

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Q3) Answer the following questions :

1- Which of the following surfaces represents the reflection of light rays from a wooden spoon - and what is the reason?



A- Regular reflection

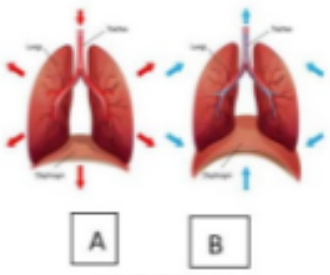
B- Irregular reflection

2- look at the following two figures. Identify the name of each of the two processes in Figures

A- inhalation

B- exhalation

C-



sherif hawary

Model (8)

Q 1) Put (×) or (√)

1-The body senses and system work separately when animals run away from their enemies(x)

2-The Egyptian jerboa lvies in forests. (x)

3-A jerboa has large ears which help in sensing the snakes. (√)

4-The Egyptian jerboa can jump for long distances depending on its long hind legs. (√)

5-Hopping of the jerboa in zigzag pattern to run away from danger is considered as a structural(x)

6-Amphibians includes frog, starred agama and salamanders (√.)

7-Arctic foxes and amphibians cannot found in the same habitat (√.)

8-Frogs have a small digestive system as they are small reptiles (x)

9-Clean water and air are very important for digestion process in amphibians (√)

10-seatbelt enable driver to see the road (x)

11-fast moving objects can be exposed to less damage than slow ones (x)

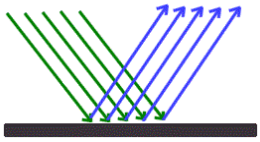
12-a small object on a low speed has a big amount of kinetic energy (x)

13-when the mass of object increase in need less force to move (x)

14--slower and smaller objects have more kinetic energy than that of larger faster (x)

Q2) What is the type of reflection? Why?

Regular reflection – because light rays are reflected in one direction from smooth surface



Q3)-Correct the underlined words

1-When you jump up, the force of friction pulls you back to the ground (gravity)

2-If the car runs out of fuel, Its speed increases (decrease)

3-The motion of a car is opposed by the gravity of air (friction)

4-Moving object stops when a force of the same amount is applied to it in the same direction (opposite)

5-The rope in the tug-of-war game may not move towards any team, if both teams push with the same force (pull)

sherif hawary

كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

